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Article

# Professional Quality of Life, Job satisfaction, and Intention to Leave among Psychiatric Nurses

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**Abstract:** Psychiatric nurses were challenged with high levels of stress, which in turn lower their professional quality of life (ProQoL) and job satisfaction and increase their intention to leave job at psychiatric settings. Adequate level of ProQoL improve patient care provision. The purpose is to assess the levels, relationships, and predictors of professional quality of life of Jordanian psychiatric nurses and their job satisfaction and intention to leave job. A descriptive cross-sectional design was used to collect data using the Professional Quality of Life Scale-5 from a convenience sample of 144 psychiatric nurses. Results showed that the mean score of compassion satisfaction (CS), burnout (BO), and secondary traumatic stress (STS) were 35.21, 27.0, and 26.36, respectively. The mean scores of intention to leave and job satisfaction were 2.33, and 3.7, respectively. Income level, educational level, intention to leave, and job satisfaction were significantly differing in CS dimension. Nurses' age, intention to leave, and job satisfaction were significantly differing in BO. Nurses' age, years of experience, frequent C-shift worked, and work affiliation were different in STS. Burnout, STS, and educational level predicted CS. CS, STS, job satisfaction, and level of education predicted BO. BO, CS, and frequent working night C-shift predicted STS. More studies are needed to assess the factors that affect ProQoL among psychiatric nurses, and to evaluate interventional programs that improve quality of life of psychiatric nurses. This is important in retaining nurses and increasing their job satisfaction. Jordanian psychiatric nurses reported moderate level of (ProQoL), high level of job satisfaction, and low intention to leave job. There is a need to enhance (ProQoL).

**Keywords:** ProQoL; job satisfaction; intention to leave; psychiatric nurses; Jordan

## 1. Introduction

Nurses in general and psychiatric nurses in particular work in a highly stressful and demanding environment. They work long and inconsistent hours, with low income, and dealing with difficult patients, which may affect their well-being, job satisfaction, and burnout [1,2]. Psychiatric nurses experience more challenging and demanding work duties. They care for difficult patients who cause burnout, and fatigue. Maintaining a good professional quality of life (ProQoL) for psychiatric nurses is very important for healthcare systems to be able to retain qualified and experienced nurses, and for patient outcomes [3–5].

ProQoL is described as the degree to which a group of workers are able to fulfil their personal needs through their experiences in their organizations [6]. ProQoL is composed of three related dimensions. Two of them are negative consequences of professional care giving: compassion fatigue (CF) and burnout (BO). The third dimension is compassion satisfaction (CS), which is the positive consequences of professional care giving [6]. CF, which is sometimes called "cost of caring" or "secondary traumatic stress (STS)", is defined as a natural outcome of physical and emotional reactions to caring for traumatized patients [6]. Nurses with high levels of STS experience physical and psychological effects such as fatigue, insomnia, headache, abdominal disturbances, sadness,

stress, depression, and decrease in attention and concentration [7–9]. BO is described as the feeling of difficulty in performing one's work effectively [6]. Nurses suffering from BO exhibit many physical and emotional difficulties such as stress, anxiety, muscle itches, job dissatisfaction and have high intention to leave their job [4,10]. CS, is described as the pleasure and satisfaction that one's feel when being able to provide effective care to people or patients [6]. In contrast to what nurses feel in BO and STS, nurses during CS feel more relaxed, stable, satisfied with their job, and have low intention to leave the job [11,12].

There are several studies that measured the levels and predictors of ProQoL among healthcare providers/professionals [13–15]; among nurses working in general hospitals [2,15–18]; and among mental health professionals such as nurses, psychiatrists, psychologist [7,19]. Also, there are few studies that measure the level and predictors of ProQoL among psychiatric nurses [3,8,10,11,20–25]. However, some of these studies measured only one dimension of the ProQoL. For example, Jalal, et al.; (2019) [26] measured secondary traumatic stress among psychiatric (STS) nurses, and found that the level was 37.64. Also, Abram and Jacobowitz (2021) [27] measured BO among psychiatric nurses and found the level to be 19.0.

Results of the levels of ProQoL among psychiatric nurses were varied in general and ranged from 23-43, 17-27, and 13-27 for CS, BO, and STS, respectively. For example, the lowest CS mean score (23.40) was reported by Iranian psychiatric nurses [24], and the highest (43.45) was reported by South African antenatal mental health nurses [21]. Regarding the BO, the lowest mean score (17.46) was reported by Turkish psychiatric nurses [23], and the highest (27.17) was among Iranian psychiatric nurses [24]. Concerning the STS, the lowest mean score (13.33) was found among by Turkish mental health nurses [11], and the highest (27.36) was reported by South African psychiatric nurses [10]. ProQoL correlated and predicted by many demographic and work-related variables. These variables were: age, gender, marital status, income, educational level, years of experience in mental health settings, ward type (acute versus chronic), working shift, intention to leave psychiatric units, and job satisfaction [3,8,10,11,20–25].

Intention to leave working at psychiatric settings has been documented in the literature [12,28–32]. Several factors were associated with intention to leave working at psychiatric hospitals especially in closed units. For example, Jiang, et al.; (2019) [30] found that more than 20% of Chinese psychiatric nurses have intention to leave their current jobs. Results also found that psychiatric nurses with poor self-rated health, lower income level, dissatisfied with job, and working more hours have higher intention to leave their job. A study conducted among Jordanian psychiatric nurses found that nurses who are male, single, with Bachelor degree, and working in acute wards have higher intention to leave their jobs [28]. Also, intention to leave job correlated negatively with job satisfaction [28] and with ProQoL [7].

There are no available Jordanian studies that assessed the ProQoL and its correlates among psychiatric nurses. Therefore, this study was conducted to assess the levels, correlates, and predictors of professional quality of life among Jordanian psychiatric nurses. More specifically, this study aimed to:

1. Assess the levels of professional quality of life dimensions (CS, BO, and STS), job satisfaction, and intention to leave among psychiatric nurses.
2. Examine the relationships between professional quality of life dimensions (CS, BO, and STS), job satisfaction, and intention to leave among psychiatric nurses.
3. Detect differences (if any) in professional quality of life dimensions, job satisfaction, and intention to leave with selected demographic and work-related variables among psychiatric nurses.
4. Assess the predictors of professional quality of life dimensions (CS, BO, and STS) among psychiatric nurses.

## 2. Methods

A cross-sectional descriptive design was employed to assess the levels and predictors of professional quality of life among psychiatric nurses. STROBE checklist directed the study.

### 2.1. Setting

Data were collected from psychiatric nurses working in inpatient mental healthcare settings in Jordan. Mental healthcare services in Jordan consists of four major sectors: Ministry of Health (MOH) sector, military sector, one private hospital, and two university affiliated hospitals. Numbers of beds available for psychiatric patients in Jordan about 677. Of them, 495 beds run by MOH, 38 beds run by the military sector, 120 beds for a private hospital, and 24 for two university affiliated hospitals (World Health Organization [WHO] 2020). In Jordan, the total number of psychiatric nurses working in all mental healthcare hospitals is approximately 441 nurses. Most of them (268) are working in the MOH sector, 51 in military sector, 86 in private sector, and 36 working in university hospitals (personal communication). The number of psychiatric nurses were lower than required according to the total population, therefore, there is a shortage of mental health nurses in Jordan.

### 2.2. Sampling and Data Collection

G\*Power equation was used to estimate the minimal required sample size. For a linear multiple regression with 13 predictors, a power of 0.80, an  $\alpha$  of 0.05, with a small effect size (0.15), and a two-tailed test, the minimum sample size recommended to be about 131 participants [33]. All Jordanian psychiatric nurses who have been working in inpatient psychiatric settings for at least one year were eligible to participate in the study. Nurses who do not provide direct patient care such as administrators and supervisors were excluded. In Jordan, the total number of nurses working in inpatient psychiatric settings is approximately 440 nurses. During the period of data collection, the eligible nurses were around 245. A total of 245 questionnaires were distributed to the selected psychiatric hospitals/units. If they decide to participate in the study, psychiatric nurses were told to fill out the questionnaire and drop it in a sealed box placed in units' reception. Sealed boxes were collected from all hospitals after two weeks of data collection. Completed questionnaires were received from 144 nurses (response rate=58.7%).

### 2.3. Instruments

Data were collected using a questionnaire that contains four parts.

#### 2.3.1. Demographic and Work-Related Variables

Demographic variables were: age, gender, marital status, monthly income (by Jordanian Dinar = \$1.4), educational level, years of experience in mental health settings, ward (acute, chronic, and mixed cases), working shift (day-A, evening-B, night-C, or mixed-ABC), and setting type (Ministry of Health, Royal Military Medical Services, or educational hospital).

#### 2.3.2. Professional Quality of Life Scale, Version 5 (ProQoL-5)

ProQoL-5 which was developed by Stamm in 2010 was used to measure CS, BO, and STS among psychiatric nurses [6]. ProQoL-5 consists of 3 subscales (10 items each). It is a 5-point Likert-type scale ranging from 1 (never) to 5 (very often). For each subscale, the possible score ranging from 10 to 50. The higher the score, the higher the level of CS, BO, and STS. A score from 10 to 22 indicates a low level, a score from 23 to 41 indicates an average (moderate) level, and a score from 42 to 50 indicates a high level. The scale has good validity and reliability. Cronbach's alphas were 0.88, 0.75, 0.81, and 0.88 for CS, BO, STS, and overall scale, respectively [6]. It has adequate convergent, discriminant, and construct validity [34]. In the current study, the Cronbach alphas were 0.81, 0.71, 0.80, and 0.76 for CS, BO, STS, and overall scale, respectively.

### 2.3.3. Intention to Leave

Intention to leave psychiatric nursing was measured by asking the psychiatric nurses about their intention to leave working at psychiatric settings. The following statement was used: "If you have the chance to leave working in psychiatric settings, would you do that"? Responses were designed on a 5-Point-Likert-type scale ranging from 1=strongly disagree to 5=strongly agree. Higher scores indicated higher intention to leave job.

### 2.3.4. Job Satisfaction

Job satisfaction was measured by asking the nurses about their level of satisfaction in working in psychiatric setting using the following statement: "Considering all things, how satisfied are you in working in psychiatric setting"? Responses were designed on a 5-Point-Likert-type scale ranging from 1=strongly dissatisfied to 5=strongly satisfied. Higher scores indicated higher job satisfaction.

### 2.4. Ethical Consideration

Ethical approval was obtained from the university's Intuitional Review Board (IRB) (No: 18/6/2021/2022). All psychiatric nurses who agreed to participate were told to sign an attached consent form with each questionnaire. The consent form includes all information regarding study's purpose, instructions, and freedom to withdraw at any time. Nurses were told that their participation is voluntary, and no personal or identifying information would be collected. Anonymity was assured by not asking any personal or identification data. To assure the confidentiality of data, the questionnaires were handled only by the primary investigator and data were stored in a personal computer with a password.

### 2.5. Statistical Analysis

The Statistical Package for Social Sciences (SPSS) version 22 was used to analyze data. Descriptive statistics were employed to measure frequencies, percentages, means, and standard deviations. Relationships between variables were examined using either Pearson Correlation Coefficients or Spearman rho. Linear multiple regression analyses were run to detect the variables that best predict ProQoL dimensions separately (CS, BO, and STS) and the intention to leave job. Significance level was at 0.05.

## 3. Results

### 3.1. Description of Demographic and Work-Related Variables

The final sample was composed of 144 psychiatric nurses, 65 (45.1%) were females, 115 (79.9%) were married, and 98 (68.1%) were holding bachelor degree. Their age ranging between 21 and 51 years (mean=35.61, SD±6.55). Nurses' experience in psychiatric settings ranging between 2 and 30 years (mean=11.71, SD±7.93). Regarding intention to leave working at psychiatric settings, 97 (67.3%) were strongly disagree/disagree to leave, 35 (24.4%) were strongly agree/agree to leave, while 12 (8.3%) were neutral with their intention to leave psychiatric settings. Regarding job satisfaction, 23 (16.0%) were strongly dissatisfied/dissatisfied with their job, 103 (71.6%) were strongly satisfied/satisfied with their job, while 18 (12.4%) were neutral regarding their job satisfaction. Other demographic and work-related variables were shown in Table 1.

**Table 1.** Demographic and work-related variables (N=144).

Variable	Mean	Standard Deviation
Age (years)	35.61	6.55
Monthly Income (Jordanian Dinar)	613.68	105.22
Experience in psychiatric settings (Years)	11.72	7.93
	Frequencies	Percentages

Gender		
Female	65	45.1
Male	79	54.9
Marital status		
Single	29	20.1
Married	115	79.9
Educational level		
Associate	38	26.3
Bachelor	98	68.1
Master and more	8	5.6
Ward/unit		
Acute	69	47.9
Chronic	19	13.2
Mixed (acute and chronic)	56	38.9
Frequent Working Shift		
A-day	44	30.6
B-evening	39	27.1
C-night	61	42.4
Place of Work		
Ministry of Health	70	48.6
Royal Medical Services	36	25.0
University Hospitals	38	26.4
Intent to leave psychiatric nursing		
Strongly disagree	49	34.0
Disagree	48	33.3
Neutral	12	8.3
Agree	21	14.7
Strongly agree	14	9.7
Job satisfaction		
Strongly dissatisfied	4	2.8
Dissatisfied	19	13.2
Neutral	18	12.4
Satisfied	78	54.2
Strongly Satisfied	25	17.4

### 3.2. Levels of Dimensions of Professional Quality of Life, Intention to Leave, and Job Satisfaction

The mean score of professional quality of life dimensions: CS, BO, and STS were 35.21 (SD±6.06), 27.0 (SD±4.24), and 26.36 (SD±6.44), respectively. Frequencies and percentages of low, moderate, and high of CS, BO, and STS were presented in detailed in Table 2. The highest percentages of ProQoL dimensions (CS, BO, and STS) were moderate. On a scale from 1-5, the mean score of intention to leave was 2.33 (SD±1.34), indicating a low level. The mean score of job satisfaction was 3.7 (SD±0.99), indicating a high level. (See Table 2).

**Table 2.** Mean scores of compassion satisfaction, burnout, and secondary traumatic stress (N=144).

Scale	Possible Range	Mean	Standard Deviation
Compassion Satisfaction	10-50	35.21	6.06
Burnout	10-50	27.00	4.24
Secondary Traumatic Stress	10-50	26.36	6.44
Intent to leave nursing	1-5	2.33	1.34
Job Satisfaction	1-5	3.70	0.99

		Frequency	Percentage
Compassion Satisfaction			
Low	10-22	6	4.2
Moderate	23-41	116	80.5
High	42-50	22	13.3
Burnout			
Low	10-22	17	11.8
Moderate	23-41	125	86.8
High	42-50	2	1.4
Secondary Traumatic Stress			
Low	10-22	44	30.6
Moderate	23-41	97	67.3
High	42-50	3	2.1
Intent to leave nursing			
Yes		35	26.5
No		97	73.5
Job Satisfaction			
Satisfied		103	81.7
Not Satisfied		23	18.3

### 3.3. Relationships of Professional Quality of Life Dimensions, Intention to Leave, and Job Satisfaction

Compassion satisfaction correlated positively with monthly income ( $r=0.295$ ,  $p<0.001$ ), educational level ( $r=0.270$ ,  $p<0.000$ ), and job satisfaction ( $r=0.347$ ,  $p<0.001$ ); and negatively with BO ( $r=-0.528$ ,  $p<0.001$ ), STS ( $r=-0.179$ ,  $p<0.05$ ), and intention to leave psychiatric settings ( $r=-0.199$ ,  $p<0.05$ ). Burnout correlated positively with STS ( $r=0.351$ ,  $p<0.001$ ), and with the intention to leave ( $r=-0.196$ ,  $p<0.05$ ); and negatively with job satisfaction ( $r=-0.331$ ,  $p<0.001$ ). Secondary traumatic stress correlated positively with frequently working shift ( $r=0.226$ ,  $p<0.001$ ), and with place of work ( $r=0.190$ ,  $p<0.05$ ). (See Table 3).

**Table 3.** Associations of compassion satisfaction, burnout, and secondary traumatic stress with demographics (N=144).

Variable	Compassion satisfaction	Burnout	Secondary traumatic stress
Compassion satisfaction	1.00		
Burnout	<b>-0.528**</b>	1.00	
Secondary traumatic stress	<b>-0.179*</b>	<b>0.351**</b>	1.00
Age	0.035	-0.115	-0.112
Gender	0.002	-0.069	-0.046
Marital status	0.135	-0.127	0.002
Monthly Income	<b>0.295**</b>	-0.145	0.023
Educational level	<b>0.270**</b>	-0.050	-0.010
Experience in psychiatric settings	-0.023	-0.028	-0.115
Ward/unit	-0.021	-0.079	0.002
Frequent Working Shift	-0.076	0.146	<b>0.226**</b>
Place of Work	0.020	0.071	<b>0.190*</b>
Intent to leave psychiatric nursing	<b>-0.199*</b>	<b>0.196*</b>	-0.037
Job satisfaction	<b>0.347**</b>	<b>-0.331**</b>	0.081

\* Significance at an alpha of 0.05 two-tailed, \*\* Significance at an alpha of 0.001 two-tailed.

### 3.4. Differences of Professional Quality of Life Dimensions with Demographics

There are differences in income level, educational level, intention to leave, and job satisfaction in compassion satisfaction dimensions. Higher CS found among those who have no intention to leave, and among those who are satisfied. Also, post-hoc revealed that nurses with income level of 640-900 JD reported higher level of CS compared to those with income levels of 400-599, and 600-639 JD. Also, nurses with bachelor and master degrees have higher CS than those with associate degree.

Regarding BO, nurses' age, intention to leave, and job satisfaction were significantly different. BO was higher among nurses whom age (21-35) than those with age of (36-51). Also, BO was higher among those who have intention to leave, and those who are dissatisfied with their job. In terms of STS, differences were found in relation to nurses' age, years of experience, frequent night C--shift worked, and work affiliation. STS was higher among youngsters (21-35), less experienced (1-9 years), working at night-C shift regularly, and those who are affiliated with teaching university hospitals (See Table 4).

**Table 4.** Differences of compassion satisfaction, burnout, and secondary traumatic stress with some demographics (N=144).

Variable	Compassion satisfaction			Burnout			STS		
	Mean	F/t	p	Mean	F/t	p	Mean	F/t	p
Age		-.574	.567		2.35	<b>.020</b>		2.41	<b>.017</b>
21-35	34.92			<b>27.79</b>			27.61		
36-51	35.51			26.16			25.06		
Income level		6.73	<b>.002</b>		1.67	.191		.871	.421
400-599	33.61			27.37			25.57		
600-639	34.52			27.52			26.38		
640-900	<b>37.67</b>			26.06			27.28		
Psychiatric experience		-.133	.894		1.82	.070		2.03	<b>.044</b>
1-9	35.15			27.67			27.49		
10-20	35.28			26.39			25.34		
Gender		-.027	.978		.828	.409		.546	.586
Female	35.20			27.32			26.69		
Male	35.22			26.73			26.10		
Marital status		-1.63	.106		1.52	.129		-.022	.983
Single	33.58			28.07			26.34		
Married	35.62			26.7			26.37		
Educational Level		5.96	<b>.003</b>		1.95	.145		.906	.406
Associate	32.45			26.84			25.94		
Bachelor	<b>36.10</b>			27.28			26.74		
Master and more	<b>37.50</b>			24.25			23.75		
Ward/Unit		.332	.718		1.13	.327		.528	.591
Acute	35.20			27.52			26.16		
Chronic	36.21			26.10			27.78		
Mixed	34.89			26.66			26.14		
Frequent Shift worked		1.43	.242		1.64	.198		3.86	<b>.023</b>
A	36.34			26.07			24.59		
B	34.10			27.18			25.84		
C	35.11			27.55			<b>27.98</b>		
Affiliation		.032	.969		2.15	.120		4.72	<b>.010</b>
Ministry of Health	35.08			27.01			25.70		
Royal Medical Services	35.30			25.94			24.89		

University Hospitals	35.36		27.97		<b>29.00</b>		
Intention to leave nursing		2.94	<b>.004</b>	-3.01	<b>0.007</b>	.164	.866
Yes	32.57		28.86			26.34	
No	35.94		26.38			26.56	
Job satisfaction		-3.89	<b>&lt; .000</b>	3.31	<b>.001</b>	-1.46	.146
Yes, satisfied	36.41		26.29			26.97	
No, not satisfied	31.13		29.48			24.74	

### 3.5. Predictors of Professional Quality of Life Dimensions

Three separate multiple regression analyses were performed to detect the variables that predict ProQoL dimensions (CS, BO, and STS). In each analysis, all demographic and work-related variables were entered as independent variables. Burnout, STS, and educational level predicted CS and accounted for 47.7% of the total variance. CS, STS, job satisfaction, and level of education predicted BO and accounted for 51.2% of the total variance. BO, CS, and frequent working night C-shift predicted STS and accounted for 32.3% of the total variance (See Table 5).

**Table 5.** Stepwise multiple regression model predicting compassion satisfaction, burnout, and secondary traumatic stress (N=144).

	B	$\beta$	F	p
<b>Predictors of Compassion Satisfaction</b>			44.40	< 0.000
1. Burnout	-0.944	-0.661		
2. Secondary traumatic stress	-0.388	0.413		
3. Educational level	2.77	0.241		
<u>Model Summary</u>				
R <sup>2</sup>	0.488			
Adjusted R <sup>2</sup>	0.477			
Total Variance	47.7%			
<b>Predictors of Burnout</b>			38.53	< 0.000
1. Compassion satisfaction	-0.409	-0.585		
2. Secondary traumatic stress	0.310	0.471		
3. Job Satisfaction	-0.749	-0.176		
4. Level of education	1.021	0.127		
<u>Model Summary</u>				
R <sup>2</sup>	0.526			
Adjusted R <sup>2</sup>	0.512			
Total Variance	51.2%			
<b>Predictors of Secondary Traumatic Stress</b>			23.75	< 0.000
1. Burnout	0.898	0.591		
2. Compassion satisfaction	-0.536	0.504		
3. Frequent shift work	1.352	0.178		
<u>Model Summary</u>				
R <sup>2</sup>	0.337			
Adjusted R <sup>2</sup>	0.323			
Total Variance	32.3%			

## 4. Discussion

The primary aims of the current study were to assess the levels, relationships, and predictors of professional quality of life of Jordanian psychiatric nurses. Also to assess the correlations of quality of life dimensions with psychiatric nurses' job satisfaction and intention to leave job.

### 4.1. Levels of Professional Quality of Life, Intention to Leave, and Job Satisfaction

Results of the current study indicated that the mean scores of CS, BO, and STS were 35.21, 27.0, and 26.36, respectively, reflecting moderate levels. These results were congruent with the results found in most similar studies that measure CS, BO, and STS among psychiatric nurses. In several studies, CS level was found to be between 20.0 [3] and 41.0 [10] indicating a moderate level. For examples, among 122 South Korean psychiatric nurses, CS was 35.05 [22], and was 39.69 among UK psychiatric nurses [20]. Regarding BO, most similar studies reported level of BO among psychiatric nurses to be between 17.0 [23] and 40.0 [3] indicating a moderate level. For instances, BO among 160 psychiatric Iranian nurses was 27.17 [24], and was 26.92 among 352 Chinese psychiatric nurses [25]. Concerning STS, most studies that measure STS among psychiatric nurses found the results to be between 13 [11] and 27.0 [10] indicating a moderate level. For examples, STS among 163 South African psychiatric nurses was 27.36 [10] and was around 26.0 among 352 Chinese psychiatric nurses [25].

Results showed that the mean score of intent to leave was 2.33 (lower than the midpoint, which is 2.5) and for job satisfaction was 3.7 (higher than the midpoint, which is 2.50). These results were congruent with results found by Zheng, et al.; (2017) that most psychiatric nurses were satisfied with their jobs, and that most job satisfaction items were ranged between 3.03 to 3.79 out of 5.0. Further, Baum & Kagan (2015) [12] found that the mean score of psychiatric nurses' job satisfaction was 3.8 out of 5. Also, our result regarding intention to leave was congruent with the results found by Kagwe, et al.; (2019) [31] who found that around one third of psychiatric nurses had intention to leave to another employment. However, contrary to our results, Jiang, et al.; (2019) [30] found a high percentage of psychiatric nurses who intended to leave their current job.

### 4.2. Relationships of Professional Quality of Life, Intent to Leave, and Job Satisfaction

Results indicated that the CS correlated positively with monthly income, educational level, and job satisfaction; and negatively with BO, STS, and intent to leave psychiatric settings. BO correlated positively with STS, and intent to leave; and negatively with job satisfaction. STS correlated positively with frequent working shift, and place of work. Our results regarding the relationships among CS, BO, and STS were congruent with the results of most studies that measure the quality of life among psychiatric nurses. For instances, several studies found that CS correlated negatively with BO and STS; and BO correlated positively with STS [11,19,23]. In line with our results regarding job satisfaction, Emmanuel & Odusanya, (2015) [35] found that the psychological well-being and the general health correlated positively with job satisfaction.

### 4.3. Differences of Professional Quality of Life with Demographics

Results of this study found that CS was higher among those who are satisfied, have no intention to leave, have higher income, and among higher educational level. Results also indicated that BO was higher among younger, those who have intention to leave, and those who are dissatisfied with their job. Further, results of the current study showed that STS was higher among younger, less experienced, working C-shift regularly, and those who are affiliated with teaching university hospitals. Our results were consistent with the results of other studies that found differences in demographics in relation to CS, BO, and STS. For instances, Mangoulia et al.; (2015) [8] found differences in CS, BO, and STS among 174 psychiatric nurses working in psychiatric units regarding their willingness to leave their current job. In addition, Basogul et al.; (2021) [11] found that CS was higher among those who have no intention to leave.

In regard to quality of life and educational level, Alhawatmeh, et al.; (2021) [1] found that quality of life of Jordanian nurses was higher among nurses with higher level of educational (master degree).

However, Park (2021) [22] and Xie, et al.; (2020) [25] found that nurses with diploma had higher levels of BO and STS. Regarding working shift, Ruiz-Fernandez, et al.; (2020) [18] found that nurses who are mostly working in evening reported higher levels of STS, which is consistent with the results found in the current study. Our results also consistent with results of Xie, et al.; (2020) [25] who found that BO and STS were higher among younger psychiatric nurses. Also, Ruiz-Fernandez, et al.; (2021) [19] found that CS was higher among younger psychiatric nurses. Further, Xie, at al.; (2020) [25] found that less experienced nurses had higher levels of STS which supported our results. Contrary to what was found in psychiatric nurses that CS, BO, and STS were differ according to the gender [17,23,25], our results found no differences between male and female nurses in regard to their dimensions of quality of life. Female nurses reported higher levels of CS and STS [8,19,25].

#### 4.4. Predictors of Professional Quality of Life

In the current study, BO, STS, and educational level predicted CS; CS, STS, job satisfaction, and level of education predicted BO; and BO, CS, and frequent working shift predicted STS. Our results regarding the predictor variables were in consistent with the results found by Park (2021) [22] who reported that educational level predicted BO and STS. Also, similar findings were reported by Xie, et al.; (2020) [25] who found that job satisfaction predicted CS, BO, and STS among psychiatric nurses. Further, in a sample of Iranian doctors, nurses, and midwives, Keshavarz, et al.; (2019) [13] found that job satisfaction, older age, and monthly income predicted CS; job satisfaction, working night shifts, and less experience predicted BO. Also, STS were predicted by job satisfaction, female gender, working c-shift, and income level [13,18].

#### 4.5. Limitations

This study is the first study that assess the levels and correlates of ProQoL among Jordanian psychiatric nurses working in inpatient psychiatric units. However, there are some limitations of this study. First, using a cross-sectional design established associations among variables but did not permit determination of causality among variables. Second, there is a risk for social desirability responses due to the use of self-reported data which may affect the results. Third, the data collected from nurses working in three psychiatric sectors (public, military, and university affiliated) and did not include nurses working in private sector. Therefore, results cannot be generalized to psychiatric nurses working in private sector. Finally, job satisfaction and intention to leave were measured by a single question with responses ranging from 1-5 which did not give details about those concepts.

#### 4.6. Implications

Future research studies should involve longitudinal studies to determine how these variables changed overtime, and may involve psychiatric nurses working in private psychiatric hospitals. Future studies may employ more valid and reliable scales that measure job satisfaction and intention to leave the job. Also, future studies should explore more individual and institutional factors that influence the ProQoL. Further, interventional studies that targeted the ProQoL of psychiatric nurses may recommended.

Continuing educational programs about ProQoL that enhances CS and reduce BO and STS were recommended to improve psychiatric nurses' psychological well-being, job satisfaction and retention. Stress reduction programs may also help to improve ProQoL especially for younger and less experienced nurses. Psychiatric nurses are also needs to incorporate some types of professional self-care activities (e.g. yoga, exercise, recreational activities) in their professional life to buffer the effect of BO and STS. It is essential to perform an ongoing assessment and evaluation for psychiatric nurses' ProQoL, job satisfaction, and intention to leave.

## 5. Conclusions

Results of this study indicated a moderate level of ProQoL. A low level of intention to leave, and a high level of job satisfaction. This study affirmed the strong relationships between ProQoL

dimensions. CS was higher among nurses with higher income level, higher educational level, lower intention to leave, and higher job satisfaction. BO was higher among younger nurses and nurses with higher intention to leave, and lower job satisfaction. STS was higher among younger and less experienced nurses, working C-shift frequently, and working in hospitals affiliated with universities. Several variables predicted the ProQoL dimensions. High levels of ProQoL among nurses improve patient care outcomes.

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